

BRIEF DESCRIPTION OF THE ACCOMPANYING DRAWINGS

[0049] Other characteristics and advantages of the invention will emerge clearly from the description given below, for information only and in no way limiting, with reference to the accompanying figures, amongst which:

[0050] Figs. 1A and 1B are axial views of part of a stator, respectively obtained in accordance with the method of the prior art and in accordance with the method of the invention;

[0051] Figs. 2A and 2B are perspective views of the stators of Figs. 1A and 1B;

[0052] Fig. 3A is an expanded schematic representation of a phase winding of the stator of Figs. 1B and 2B, after shaping at step 1);

[0053] Fig. 4 is an expanded schematic representation of three phase windings of the stator of Figs. 1B and 2B, showing the areas where these three windings cross in the stator after insertion, the circles indicating the areas of local shaping;

[0054] Fig. 5 is a side view of the insertion tool after placing of the windings on this tool at step 2);

[0055] Fig. 6 is a perspective view along arrow VI of Fig. 5;

[0056] Figs. 7A and 7B are schematic representations illustrating step 3) of inserting the turns into the slots of the stator by axial movement of the insertion tool;

[0057] Fig. 8 is a side view of the laminations and the insertion tool at step 3);

[0058] Fig. 9 is a perspective view along arrow IX of Fig. 8;

[0059] Fig. 10 is a schematic side view of a stator obtained in accordance with the invention; and

[0060] Figs. 11A, 11B and 11C are schematic representations of the cross-sections respectively of a slot of a stator of the invention with a width corresponding to one wire diameter, to two wire diameters and a slot of a stator of the prior art.

[0061] The insertion method is adapted to a wave winding 50 to be inserted into a stator 1 of a motor vehicle alternator or alternator starter.

Change(s) applied
to document,

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